

Certificate

Chemistry Microbiology and Technical Services

CLIENT: Alaskan Copper Works

P.O. Box 3546 Seattle, WA 98124 ATTN: Jim Brown LABORATORY NO. 12193

DATE: Sept. 27, 1988

PO# M7178

REPORT ON: LIQUID

FILE

SAMPLE

IDENTIFICATION: Submitted 09/21/88 and identified as shown below:

Metro Waste Discharge ID# 9-21-3200-M7178

TESTS PERFORMED AND RESULTS:

parts per billion (ug/L)

Sample Method Blank

Trichloroethylene

<10.*

<1.

*Comment

Sample was in a pint jar (not a VOA bottle) with approx. one-half inch of headspace.

The sample was very viscous and slightly colored. The sample was analyzed at a 1/1000 and a 1/10 dilution. An unsuccessful attempt was made to analyze the sample undiluted. The undiluted sample foamed in the purge vessel so the analysis was aborted.



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<u>Key</u>

< indicates "less than"

Respectfully submitted,

Laucks Testing Laboratories, Inc.

B. Gleason

BG:emt



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APPENDIX

Surrogate Recovery Quality Control Report

Attached are surrogate (chemically similar) compounds utilized in the analysis of organic compounds. The surrogates are added to every sample prior to extraction and analysis to monitor for matrix effects, purging efficiency, and sample processing errors. The control limits represent the 95% confidence interval established in our laboratory through repetitive analysis of these sample types.



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JOB No. 12193 DATE: 09/23/88

Sample No. B0923GVO.WA1	Matrix: Water	Analysis:	GC-HALL
Surrogate	Percent	Comment	Control
Compound	Recovery		Limits
4-Bromofluorobenzene	78		76 - 121
Bromochloromethane	108		73 - 125
Sample No. 1@1/10	Matrix: Water	Analysis:	GC-HALL
Surrogate	Percent	Comment	Control
Compound	Recovery		Limits
4-Bromofluorobenzene	80		76 - 121
Bromochloromethane	106		73 - 125

JOB No. 12193 DATE: 09/23/88

Sample No. B0923GVO.WA1	Matrix: Water	Analysis:	GC-PID
Surrogate Compound	Percent Recovery	Comment	Control Limits
4-Bromofluorobenzene	105		85 - 117
Sample No. 1@1/10	Matrix: Water	Analysis:	GC-PID
Surrogate Compound	Percent Recovery	Comment	Control
4-Bromofluorobenzene	104		85 - 117